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EXAMINER

TRAN, H

ART UNIT

PAPER NUMBER

1764

DATE MAILED:

03/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/217,993

Applicant(s)

Graham et al

Examiner

Hien Tran

Group Art Unit

1764



☒ Responsive to communication(s) filed on Jan 10, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 3, 4, 6-8, 10, 11, and 13-24 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 3, 4, 6-8, 10, 11, and 13-24 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Dec 22, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both the metal carrier 2 (page 3, line 9) and the line 2 (page 4, line 22). Correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

4. The art area applicable to the instant invention is that of catalytic converter.

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One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

5. Claims 1, 4, 6-8, 11, 13-15, 17-20, 22-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Whittenberger et al (5,651,906) in view of Kohno et al (5,653,825).

Whittenberger et al disclose a catalytic converter comprising:

a honeycomb structure shaped in a cylindrical form, said honeycomb structure having a plurality of channels (i.e. air vents) extending in an axial direction thereof; and

a cylindrical case covering an outer peripheral surface of the honeycomb structure wherein the case is composed of stainless steel.

The apparatus of Whittenberger et al is substantially the same as that of the instant claims, but fails to disclose whether the stainless steel case may be ferritic stainless steel case containing Mo.

However, Kohno et al disclose the conventionality of using ferritic stainless steel containing Mo of less than or equal to 2% for constructing converter housing due to its excellency in stress corrosion cracking resistance.

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It would have been obvious to one having ordinary skill in the art to use the ferritic stainless steel containing Mo as taught by Kohno et al as an alternate material for the converter housing in the apparatus of Whittenberger et al for an improved stress corrosion cracking resistance and since use of such is conventional and no cause for patentability here.

6. Claims 3, 10, 16, 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Whittenberger et al (5,651,906) in view of Kohno et al (5,653,825) as applied to claims 1, 4, 6-8, 11, 13-15, 17-20, 22-24 above, and further in view of Yokokoji et al (4,925,634).

The modified apparatus of Whittenberger et al is substantially the same as that instantly claimed, but fails to disclose whether the catalytic converter may be located inside a muffler housing.

However, Yokokoji et al disclose the conventionality of providing a catalytic converter 12 in combination with the muffler 62.

It would have been obvious to one having ordinary skill in the art to arrange the catalytic converter inside the muffler as taught by Yokokoji et al to purify exhaust gas as well as to absorb noise, as such is conventional in the art and no cause for patentability here.

Response to Arguments

7. Applicant's arguments filed 1/10/01 have been fully considered but they are not persuasive.

Applicants argue that the reference of Kohno et al only discloses that the Mo should be not more than 2% by weight and therefore does not read on the Mo range of 0.3-2.5 % , and specifically 1.2% in the instant claims. Such contention is not persuasive as the range in Kohno et al would

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encompass the Mo range of 0.3-2.0% of the instant claims. Note that the 1.2% of the instant claims would fall well within the Mo range of Kohno et al (note the Mo percentages of 0.8 and 1.3 % in examples shown in table 1 in cols. 9-10).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (703) 308-4253. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode, can be reached on (703) 308-4311. The fax phone number for this Group is (703) 305-3599 (for Official papers after Final), (703) 305-5408 (for other Official papers) and (703) 305-6078 (for Unofficial papers).

When filing a FAX in Group 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other

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communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

HT
October 2, 2000

Hien Tran

**HIEN TRAN
PRIMARY EXAMINER
GROUP 1700**